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AN EMPIRICAL STUDY INTO THE ACCORDANCE OF ZERO-WASTE LIFESTYLE WITH CONSUMER PURCHASING ATTITUDES AND BEHAVIOURS

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ABSTRACT: The consumerist lifestyle pursued by most of society has been conducive to environmental pollution, with bad consumer habits and rapidly changing trends contributing to the problem. One emerging trend among some eco-sensitive consumers is a zero-waste lifestyle premised on maximum reduction of generated waste. The article aims to verify the accordance of a zero-waste lifestyle with the actual purchasing attitudes and behaviours of consumers, as well as identify the stimulants and destimulants of the concept. The survey was conducted in Poland in 2023 on a sample of 1000 respondents using the CATI method. Consumers are no strangers to behaviour reflecting a zero-waste lifestyle. More than 80% of the respondents reduce consumption, find a new home for unnecessary items, recycle, reuse, and repair them. Slightly less often, consumers act preemptively, that is, they first contemplate the need to purchase a given good and eventually abandon the idea. The purchasing behaviour of zero-waste lifestyle advocating consumers is well thought out, planned and rational. In contrast, those who like to make purchases, mainly in shopping malls, and are fond of buying gadgets and brand-name products, are not enthusiasts of zero-waste lifestyle. The high scale of pro-environmental and responsible consumer purchasing attitudes and behaviours should be leveraged as a guideline in developing product and promotional strategies, emphasising educational outreach and disseminating information on consumers' propensity to reduce waste. Support for zero-waste lifestyle initiatives should become integral to these efforts. Further raising of awareness and recognition of the forms of behaviour destimulating such a lifestyle is essential. A clear understanding of behaviours fitting into zero-waste lifestyle realisation, including pro-ecological and responsible consumer attitudes, is of key relevance to economic practitioners and policymakers seeking to implement a sustainable approach to consumption and waste reduction.

KEYWORDS: zero-waste lifestyle, consumer, attitudes, shopping behaviour, stimulants and destimulants

Introduction

The concept of zero waste (ZW) emerged as an alternative to consumerist lifestyle and overconsumption, both of which exacerbate the problems of the modern world (Badowska & Delińska, 2019). A consumptive lifestyle promotes intensified shopping, contributes to environmental degradation, increases waste, deepens social inequality and leaves individuals addicted to materialism. This results in high social and environmental costs, concurrently posing a serious threat to the planet's future (Kaza et al., 2018; Clune et al., 2017). In response to these challenges, the trend of a zero-waste lifestyle emerged. Consumers identifying with it focus on counteracting excess waste and taking efforts to protect the environment (Bogusz et al., 2021).

Zero-waste lifestyle, also referred to in the literature as the idea or concept of zero waste (Badowska & Delińska, 2019), represents an ethical, economical and forward-thinking approach (ZWIA, 2018), which has gained prominence as an integral part of some of the sustainability programs pursued by individual consumers and their families, communities, organisations and cities (Connett, 2007; Murray et al., 2017; Zaman & Lehmann, 2013; Mesjasz-Lech, 2021; UN-Habitat, 2023). The concept of zero waste stands in opposition to the single disposal characteristic of the linear economy, thereby clearing the way for innovative products and solutions within a circular economy (Zaman, 2017; Sheehan, 2000). It aims to preserve the value of products and resources by promoting such practices as: elimination, volume reduction, reuse, repair, recycling, prevention, reduction and avoidance of waste (PSZW, 2024). In the past, the waste problem was mainly viewed as a business challenge, and the term 'zero waste' was most widely associated with manufacturing processes and supply chain management (Song et al., 2015). The term was first used to recover resources from chemicals (Palmer, 2004). The Zero Waste International Alliance (ZWIA) reiterates the need for "conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health" (ZWIA, 2018). Zaman (2017) notes that it may prove impossible to achieve the goals of eliminating incineration and zero landfill under the existing system of resource consumption and waste management practices.

Consumer purchasing and consumption attitudes and behaviours are important implications in solving today's environmental problems. A zero-waste lifestyle enables consumers to directly achieve their objectives by modifying existing habits and forming new consumption and behaviour patterns. The literature indicates that behavioural patterns and consumer choices aimed at sustainable practices contribute to significant material and energy savings, bringing environmental benefits (Bogusz et al., 2021; Wilts et al., 2021). Waste management is a time-consuming and challenging activity (Aprilia et al., 2022). Vringer et al. (2015) indicate that consumers generally opt to purchase sustainable products. This may stem from the fact that public interest in practices of lower environmental impact and products with longer life cycles hinges upon the perceived benefits for individuals and the global ecosystem (including economic and financial benefits, community benefits, environmental benefits, industry benefits and stakeholder benefits) (Whitmee et al., 2024; Pietzsch et al., 2017; Smoluk-Sikorska & Malinowski, 2021). Other authors draw attention to the impact of the so-called green marketing on consumer purchasing behaviour, particularly through the promotion of organic products and environmental promotional activities (Lavuri et al., 2021; Anh et al., 2024), the role of environmental awareness, social norms and the sense of well-being (Lin & Niu, 2018).

To better understand zero-waste lifestyle and popularise it more efficiently, detailed analysis, research and assessments of practices, attitudes and behaviours are needed to effectively promote changes in decision-making that benefit the environment (Łuczka-Bakuła, 2000; Leismann et al., 2013; Pietzsch et al., 2017; Szczygieł et al., 2024). Despite consumers' increasing awareness of the negative impact their behaviour exerts on the environment and health, including their growing awareness of the added value zero waste brings, a substantial paradigm shift in attitudes and behaviours is still needed to render them consistent with the concept (Watson & Smith, 2020). Considering the above considerations, the article aims to verify the accordance of zero-waste lifestyle with actual purchasing attitudes and behaviours, as well as identify the stimulants and destimulants entailed in this concept. Several research questions were formulated under the main objective:

1. What is the scale of consumer purchasing attitudes and behaviours consistent with a zero-waste lifestyle?

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2. What purchasing attitudes and behaviours that are conductive (stimulants) or non-conductive (destimulants) to zero-waste lifestyle propagation and realisation can be identified, and to what extent?
3. Are consumers' declarations of zero-waste lifestyle realisation consistent with their actual purchasing attitudes and behaviours?

At the outset of the study, three hypotheses were assumed:

1. Polish consumers implement the tenets of a zero-waste lifestyle through efforts to reduce overconsumption and generate unnecessary post-consumption waste.
2. There is a positive correlation between a zero-waste lifestyle and pro-ecological, responsible consumer purchasing attitudes and behaviours that are well thought out, planned and rational.
3. There is a negative correlation between a zero-waste lifestyle and the consumer purchasing attitudes and behaviours conducive to overconsumption and the consequent generation of post-consumption waste.

The main objective was accomplished via a literature review and a quantitative study conducted in Poland. The results can serve as a complement to the research of other authors addressing the subject of zero-waste lifestyle, deepening the findings reached in earlier studies. The study of actual consumer purchasing attitudes and behaviours within the context of environmental issues, closed-loop economy and means of excess consumer waste reduction is timely and vital. The publication of research results in this area represents an important step in raising environmental awareness, the formation of which is crucial to achieving sustainable development.

Literature review

The results of studies published under the United Nations Environment Programme (UNEP, 2024a, 2024b) and in the Lancet Pathfinder Commission report (Romanello et al., 2024) confirm that any wasted amount of consumer goods poses serious threat to the environment and people at risk of food shortages, but also raises other problems. The consumptive lifestyle of humans amplifies the increase in greenhouse gas emissions, exacerbating the climate problems and environmental pollution, contributing to the depletion of Earth's resources and the degradation of biodiversity. Simultaneously, the climate crisis, the shrinking of resources, and the growing population have intensified the demand for such a valuable resource as waste (Whitmee et al., 2024). This calls for responsible waste collection, segregation, management and recovery solutions (Harbiankova & Kalinowski, 2023; Lehmann, 2010). In the European Union (EU), an average of 4.99 tons of total waste per capita was generated in 2022, according to Eurostat data (2024), which is only a slight decrease compared to the values recorded in 2010-2012, when the average had been 5.08 tons per capita. Noteworthy is that the averaged data do not reflect the considerable differences among the member states, in terms of the amount of per-capita waste generated and the waste generation trends observed. In 2022, for instance, the amount of waste generated in the EU ranged from less than 1.3 tons per capita in Portugal to 16.9 tons per capita in Finland. Such considerable differences partly reflect the different economic structures of member states, and the extreme values may result from specific national circumstances. Worth highlighting is the amount of waste per capita in 12 of the 27 EU member states, exceeding the EU average in 2022.

The 'throw-away' culture, in addition to ecological and environmental consequences, also leads to negative effects on the social ground, as it prevents the building of respect for work and resources, while the processes of globalisation exacerbate the problem of disappearing local cultures and traditions. Overconsumption of food, for example, leads to civilisation diseases, often increases the sense of dissatisfaction and stress, as well as contributes to the deterioration of mental well-being among consumers, spawns financial problems and addictions (Amin et al., 2022; Afshin et al., 2019).

The linear economic model is centred on gathering, processing and disposing of resources when no longer needed (Pietzsch et al., 2017). Fundamental to environmental awareness, and a means of promoting environmental sustainability through conscious behaviour and choices, is the concept of zero waste, which in early studies incorporated the '3R principle: 'reduce, re-use and recycle' – the underlying tenets of a sustainable waste management system (Hansen et al., 2002). Over time, the concept has evolved to include several closed-loop strategies aimed at reducing the consumption of

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natural resources and materials and minimising waste production. These can be prioritised by their levels of closed-loop circulation (Song et al., 2015; Kirchherr et al., 2017; Sheehan, 2000; Mckay, 2024). It is assumed that the higher the closed-loop level, the greater the environmental benefit. Transition to a closed-loop economy forces changes of a systemic nature, and spurs new technological solutions enabling the redesign of product life cycles, to minimise the consumption of raw materials, reduce the waste generated, and maximise material reuse and recycling. This entails transformation of the entire supply and value chain, necessitating involvement of multiple stakeholders in the paradigm of closed-loop consumption and production. The tool that sets the right priorities to meet Europe's closed-loop economy goals is the waste management hierarchy (UNEP, 2024b).

The move toward zero waste production necessitates a fundamental change in the perception of waste management. Consumers have an essential role to play in terms of waste generation and management control. Brown et al. (2022) emphasise that, in addition to a focus on recycling or waste reduction, popularisation of waste prevention strategies is essential. Consumers, through their purchasing decisions and daily behaviour, can directly impact the amount of waste generated. Minimisation of waste generation can be achieved by a critical approach to consumption patterns, coupled with informed and responsible purchasing decision-making. Key efforts include consumer proactivity in waste segregation and composting, as well as support for zero-waste initiatives, demonstrating the significance of their choices, locally and globally (UNEP, 2024b). Other measures involve assessment of the reasonableness of the purchase made (Lee et al., 2023) and purchasing behaviour rationality (Arcidiacono, 2011), preference for reusable products (WEF, 2021), repair or reuse of items whenever possible (Wilts et al., 2021) and exploration of sustainable options e.g., packaging (Caspers et al., 2023), preference for recycled products or products that can be reprocessed (Polyportis et al., 2022), better use of food in conjunction with shopping planning (Marek-Andrzejewska & Wielicka-Regulska, 2021), and alternative pet food movements (Castrica et al., 2018). Shopping planning, proper food storage, as well as creative use of leftovers, can reduce food waste, constituting a large part of the waste generated (PROM, 2021). Engaged consumers, by educating others and informed decision-making, become, so to speak, ambassadors of a zero-waste lifestyle, potentially inspiring other individuals to undertake similar efforts. All of the above avenues of action need to be popularised in order to draw consumers' attention to their choices and encourage them to revise their shopping habits and join in the popularisation of a zero-waste lifestyle (Mckay, 2024; PSZW, 2024).

Zero-waste lifestyle has been shaping a new type of social behaviour, thus opening up new opportunities for the realisation of sustainable consumption and production (Goryńska-Goldmann & Mytko, 2021; Pieńkowski et al., 2018). The findings of Vringer et al. (2015) reveal that sustainability is important to consumers, and government bodies should promote more sustainable consumption. Consumers, however, are facing a social dilemma, for although they do recognise the importance of sustainable consumption, the higher prices of such products may lead them to leave sustainability efforts to others. Popularisation of zero-waste lifestyle, along with responsible and sustainable consumption patterns, as well as comprehension of the factors encouraging or inhibiting environmentally friendly consumer choices, presents a challenge in terms of consumption policy and public health, with important implications for the future well-being of people, preservation of diversity and protection of the environment.

Research methods

Both secondary and primary sources were used to implement the study's objective, answer the research questions and verify the hypotheses assumed. To conduct the study of consumer zero-waste lifestyle and the purchasing attitudes and behaviours favourable or unfavourable to the idea, part of the results obtained from a survey of 1000 Polish residents carried out in 2023 were used (Murawska, 2025). The survey was carried out via the CATI method (computer-assisted telephone interviewing), using an authorial questionnaire developed for the purpose of implementing research project No. 2022/06/X/HS4/01158, financed by the National Science Centre [Polish: Narodowe Centrum Nauki], entitled "Dekonsumpcja jako alternatywny trend racjonalizacji zachowań w dobie globalnego kryzysu gospodarczego [Deconsumption as an alternative trend of behaviour rationalisation in the era of the global economic crisis]." The sampling for the study was random, representative of both the socio-demographic characteristics of the Polish population (gender, age) and the administrative divi-

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sion of the country into NUTS 2 regions (voivodeships). The sample selection was developed based on data collected by the Central Statistical Office in Poland (data for 2022). The survey was conducted from May 12 to May 30, 2023. The survey (CATI telephone interviews) was conducted by 30 interviewers, and the average survey time was 00:26:39.

The respondents comprised a representative group of Polish residents aged 18 and over. The largest percentage of respondents lived in the following voivodeships: Mazowieckie (14.2%), Śląskie (11.7%), Wielkopolskie (9.2%) and Małopolskie (8.8%), while the smallest: Lubuskie (2.6%), Opolskie (2.6%), Podlaskie (3.0%), Świętokrzyskie (3.2%) and Warmińsko-Mazurskie (3.8%). Among the survey participants, 51.6% were women and 48.4% were men. The largest group of respondents were people from the oldest age group, i.e. 56 or older – 37.6%. 20.4% were people aged 36-45, 15.2% were aged 46-55, and less than every tenth respondent was between 18 and 25 years old (9.9%). The majority of respondents had higher education (49.2%) and secondary/post-secondary/post-high school (40.6%). Almost every tenth respondent indicated basic vocational education (9.7%), and only 0.5% indicated primary/lower secondary school. The largest percentage of respondents were employed people (68.0%). Considerably fewer respondents declared that they were retirees or pensioners (23.0%). Student or pupil status was indicated by 5.3% of respondents, and unemployed status by 3.7%. Every fifth respondent indicated that they lived in cities with more than 500 thousand inhabitants (19.9%) and up to 50 thousand inhabitants (21.2%). 16.5% of respondents answered that they were residents of cities with 50 to 100 thousand inhabitants, and 15.0% were residents of cities with 101 to 500 thousand inhabitants. In turn, 14.5% of all respondents were inhabitants of traditional villages, and 12.9% – villages near large cities.-

For the purpose of the five-person expert group study (Grabiński, 1992), a selection was made of the statements contained in the survey questionnaire. Nine statements describing zero-waste lifestyle (9R – Rethink, Refuse, Reduce, Reuse, Rehome, Repurpose, Repair, Recycle, Rot), 11 statements regarding environmentally friendly and responsible purchasing attitudes and behaviours of consumers favouring zero-waste lifestyle (zero-waste stimulants; S1 to S11), and 11 statements considered unfavourable to a zero-waste lifestyle (zero-waste destimulants; D1 to D11) were selected (Table 1).

Table 1. Variables included in the study of the accordance of the zero-waste lifestyle with actual consumer purchasing attitudes and behaviours

Variable	Declared statement*
Declarations defining zero-waste lifestyle – dependent variables (9R)	
1. Rethink	I feel threatened with an environmental crisis and worry about the social and environmental consequences of my purchasing decisions.
2. Refuse	I refuse goods that harm the environment and people.
3. Reduce	I reduce my consumption of unnecessary products and deliberate whether they are needed.
4. Reuse	I reuse products and extend their life cycle.
5. Rehome	I give away/donate unneeded or used items to other people.
6. Repurpose	I repurpose old items and give them a second life.
7. Repair	I repair broken items instead of throwing them away.
8. Recycle	I separate, recover and recycle waste.
9. Rot	I purchase and consume products that decompose, I compost them, I make natural fertilizers.
Purchasing attitudes and behaviours promoting a zero-waste lifestyle (stimulants/independent variables)	
S1	My expenses are always well thought out and planned.
S2	I avoid impulse purchases.
S3	I am against purchasing products in excess.
S4	I always purchase quality products.
S5	I purchase green (eco-friendly) products.
S6	I prefer to make products myself rather than buy them.

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Variable	Declared statement*
S7	When purchasing, I check the product's multifunctionality and long-term usability.
S8	I purchase used, second-hand products, e.g., via websites or in second-hand stores.
S9	I forgo purchasing trendy, brand-name and more expensive items in favor of cheaper ones, or when I already have at home similar or the same products that are still useful.
S10	I only purchase what is necessary.
S11	I research information about the product to have a good knowledge of it at the time of purchase.
Purchasing attitudes and behaviours non-conductive to a zero-waste lifestyle (destimulants/independent variables)	
D1	I like shopping.
D2	I treat shopping as a mood booster and a way to relieve tension.
D3	I purchase on impulse.
D4	I purchase unnecessary products in excess quantities.
D5	I buy useless and valueless items.
D6	I only purchase branded products.
D7	I choose products that emphasize my personality.
D8	I like to follow fashion trends.
D9	I like making purchases in shopping malls.
D10	I like shopping in stores with elegant décor.
D11	I have a weakness for gadgets.

* A five-point Likert scale was used in the study: 5 – strongly agree; 4 – rather agree; 3 – hard to say; 2 – rather disagree; 1 – strongly disagree.

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

The data collected were subjected to statistical analysis using SPSS, Statistica and MS Excel. Basic statistics such as mean, median, kurtosis, skewness, and standard deviation were calculated. To represent the differences in Polish consumers' opinions on their purchasing behaviour, mean indications were calculated, whereas to verify whether their declarations of pursuing a zero-waste lifestyle are consistent with their actual purchasing attitudes and behaviours, Spearman's rank correlation coefficients were calculated.

Research results

Manifestations of a zero-waste lifestyle among Polish consumers

The survey provided insight into whether consumers residing in Poland are building and constituting a sustainable and responsible society, are responsive to the environmental crisis, and are undertaking steps to minimise their impact on the environment. Figure 1 shows that the highest percentage of 'strongly agree' or 'rather agree' responses regarding zero-waste lifestyle behaviour pertains to Reduce and Rehome (po 87.8%) efforts. This means that the respondents relatively most frequently declared reduced consumption of unnecessary products and redistribution of such products to other people. Next are the Recycle (84.7%) and Repair (82.1%) efforts, indicating that many respondents are committed to waste segregation and repairing items instead of throwing them away. The Reuse (81.0%) and Refuse (76.9%) behaviours likewise show high levels, suggesting that the respondents often reuse products and try to avoid goods that can harm the environment or people. The Rethink (74.9%) behaviour is less popular, which means that relatively fewer consumers feel strongly threatened by the environmental crisis and are concerned about the social and environmental consequences of their purchasing decisions. This behaviour indicates high environmental awareness, although not all respondents reported equally strong feelings of threat. Penultimate were con-

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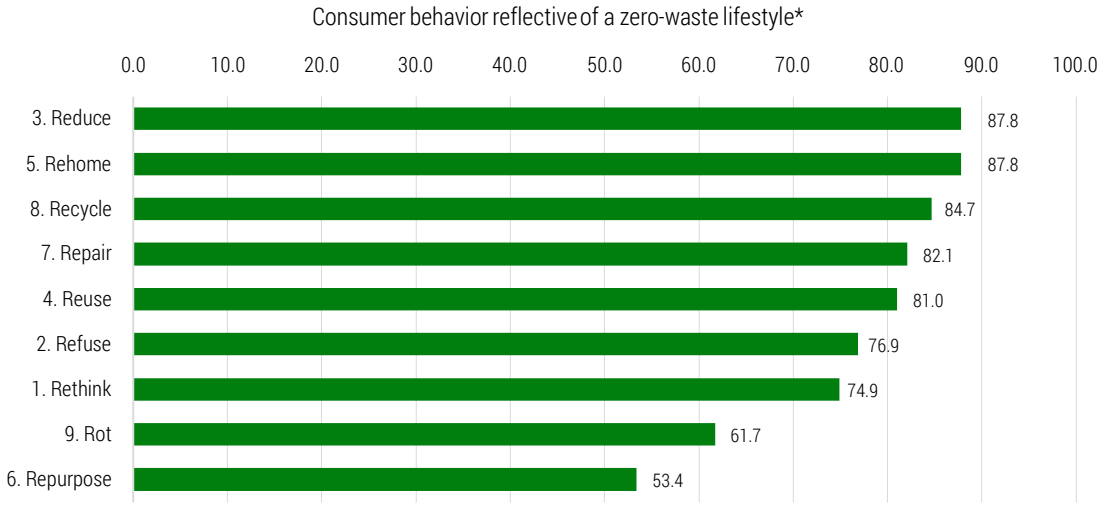
sumer efforts to compost and make natural fertilisers (Rot), with 'rather' and 'definitely' declarations of such activities indicated by 61.7% of the respondents. While this result is lower compared to the other behaviours, it shows that a sizable portion of the respondents do implement organic waste management practices. Repurpose scored lowest (53.4%), indicating that consumers are less inclined to reutilise old items as something new or give them a new life, suggesting that repurposing goods requires more time, skill or ingenuity than other pro-ecological activities. In summary, most respondents engage in various activities aimed at reducing waste and alleviating negative environmental impacts, with the highest percentage reporting reduced consumption, redistribution of unnecessary items to others and recycling (Figure 1).



*Sum of "strongly agree" and "rather agree" responses; see Table 1 for a description of statements reflecting a zero-waste lifestyle (9R).

Figure 1. Consumer behaviours reflecting a zero-waste lifestyle

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

Table 2 presents the Spearman's rank-order correlations between various variables pertaining to a zero-waste lifestyle. In interpreting the results, note should be taken of the correlations marked as significant (at $p<0.05$ level of significance), indicating statistically significant relationships between the variables. The highest correlation coefficient (0.44) has been found between the variables Repair and Reuse. This suggests that people who frequently repair goods also tend to reuse them, which possibly stems from a general interest in extending the life of products. A moderate positive correlation (0.35) exists between Recycle and Repair, as well as between Refuse and Reduce (also 0.35). This correlation provides a hint that people who are dedicated to waste segregation may be more inclined to repair goods. At the same time, those who limit their consumption may be more prone to avoiding environmentally harmful products. Reuse behaviour is positively correlated with Recycle (0.37) and Rehome (0.34), which may suggest that people who reuse goods often engage in other efforts aimed at the reduction of waste. The coefficient of correlation between Repair and Rehome efforts (0.34) suggests that people who repair items may likewise be inclined to redistribute unneeded goods to others, owing to a similar approach to maximising the value of owned items. The correlation of Rot with Repurpose and Reuse, at 0.33, may imply that people who acquire and compost decomposable products, compost them and make natural fertilisers, readily take steps to process or reuse goods, thereby reducing organic and other waste. The weaker yet significant correlations between Refuse and Recycle (0.23) as well as Refuse and Repair (0.24) may indicate that people who refuse to purchase environmentally harmful products may be inclined to segregate waste and repair items, to reduce their environmental impact (Table 2).

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Table 2. Spearman's rank-order correlation between dependent variables reflecting a zero-waste lifestyle

Variable	Spearman rank-order correlation, *correlation coefficients significant at p<0.05								
	1. Rethink	2. Refuse	3. Reduce	4. Reuse	5. Rehome	6. Repurpose	7. Repair	8. Recycle	9. Rot
1. Rethink	1.00	0.24*	0.25*	0.28*	0.22*	0.17*	0.20*	0.21*	0.30*
2. Refuse	0.24*	1.00	0.35*	0.25*	0.24*	0.06	0.24*	0.23*	0.12*
3. Reduce	0.25*	0.35*	1.00	0.29*	0.33*	0.09*	0.27*	0.28*	0.22*
4. Reuse	0.28*	0.25*	0.29*	1.00	0.34*	0.31*	0.44*	0.37*	0.33*
5. Rehome	0.22*	0.24*	0.33*	0.34*	1.00	0.16*	0.34*	0.30*	0.26*
6. Repurpose	0.17*	0.06	0.09*	0.31*	0.16*	1.00	0.28*	0.14*	0.33*
7. Repair	0.20*	0.24*	0.27*	0.44*	0.34*	0.28*	1.00	0.35*	0.26*
8. Recycle	0.21*	0.23*	0.28*	0.37*	0.30*	0.14*	0.35*	1.00	0.29*
9. Rot	0.30*	0.12*	0.22*	0.33*	0.26*	0.33*	0.26*	0.29*	1.00

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

In sum, the study shows that various zero-waste lifestyle behaviours are interrelated. Particularly strong relationships have been found between measures aimed at extending the life cycle of products (e.g., repair and reuse), suggesting that people who engage in one type of environmentally friendly efforts are also more inclined to engage in other, complementary behaviours. The survey also proved that mindful forgoing unnecessary products, repairing and recycling are key elements of a zero-waste lifestyle, promoting a green approach to consumption and waste management.

Consumer purchasing attitudes and behaviours are conductive (stimulants) or non-conductive (destimulants) to a zero-waste lifestyle

Figure 2 shows consumers' declarations of their purchasing attitudes and behaviours conducive to a zero-waste lifestyle, referred to as the stimulants of the idea under analysis. The results are presented based on the sum of 'strongly agree' and 'rather agree' responses for the various statements. The survey proved that nearly all of the respondents (93.4%) declared an attitude of opposition to purchasing products in excess, which indicates a strong tendency to reduce consumption. This means that consumers are aware of the waste problem and seek to avoid accumulating unnecessary items. When making a purchase, consumers attach great importance to checking the durability and multifunctionality of products. Such declarations were made by 87.8% of the surveyees. They choose products suitable for various uses, which indicates their concern for minimising waste by purchasing long-lasting goods. The consumers' planning of purchases represents another attitude of significance in terms of zero-waste lifestyle stimulation. Most respondents (83.3%) consider their spending well thought out, as it helps avoid haphazard purchases and overconsumption. The respondents show a strong tendency to limit purchases to the most needed items, and as many as 81.6% of the surveyees declared they only purchase what is necessary. This approach is in line with the zero-waste principle, promoting minimalism and reduction of overconsumption. Consumers seek to avoid impulse purchases, and such a declaration was made by 79.9% of the respondents. This is crucial in terms of controlled consumption and avoidance of unnecessary spending, which could lead to excessive accumulation of items. The vast majority of the surveyed respondents attach more weight to the functionality of products than to trends and avoid purchasing fashionable, brand-name goods if they are not of essentiality (78.7%).

The analysis also revealed that consumers' awareness of the products they purchase is relatively high. Indeed, 73.2% of the surveyed declared the fact of researching information about products, and are well-informed at the time of purchase. This reflects a responsible approach to consumption, as well as attests to precautionary efforts to prevent unnecessary product purchasing and consumption. The respondents likewise prefer to purchase quality products (71.1%), which are more durable and

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last longer. This approach can be considered consistent with zero waste, by which product durability constitutes a key factor in reducing waste. More than half of the surveyed (57.2%) declare they purchase organic products. Although this result is lower than other statements, it shows that eco products are popular, albeit less than the general attitude of saving and avoiding excessive purchases. Nearly half of the respondents are open to purchasing second-hand products (51.2%), e.g., via web portals or in second-hand stores. This approach is favourable to the idea of reuse and waste reduction, though it is not as popular as the avoidance of overconsumption or the purchasing of durable products. Merely one in three respondents declared a preference for making their own products rather than purchasing (34.2%), which is the lowest rated behaviour, possibly due to lack of time, skills or access to needed materials.

*Sum of 'strongly agree' and 'rather agree' responses; see Table 1 for a detailed description of independent variables – zero-waste lifestyle stimulants.

Figure 2. Consumer opinions reflecting purchasing attitudes and behaviours favourable to the idea of zero waste – stimulants

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

Summing up, the respondents are most supportive of behaviours involving avoidance of overconsumption, opting for durable and multifunctional products, and well-thought-out planning of purchases. They are less committed to purchasing used items or making products themselves. It is therefore apparent that consumer preferences are centred on conscious and minimalist choices, which is consistent with the idea of zero waste.

Figure 3 shows consumer purchasing attitudes and behaviours identified as destimulants of a zero-waste lifestyle and thus not favourable to the popularisation of the idea. Indeed, the largest number of respondents admit they prefer products expressing their personality (46.0%). Product choices motivated by personal style and identity can lead to purchases of unnecessary or trendy items, which is conducive to overconsumption and inconsistent with zero waste principles. The 'I like shopping' consumer attitude, indicated by 45.4% of the respondents, reflects a consumerist approach to purchasing and enjoyment of the buying process itself. The 'I like shopping in stores with elegant décor' response was marked by 43.6% of the surveyed. The choice of shopping locations based on their décor may indicate a certain degree of attachment to aesthetics and atmosphere, possibly contributing to impulse buying, especially at visually appealing stores. In contrast, 42.9% of the respondents are fond of making purchases in shopping malls. The declarations of such an attitude may be conducive to impulse purchases, especially upon exposure to promotions and a large selection of

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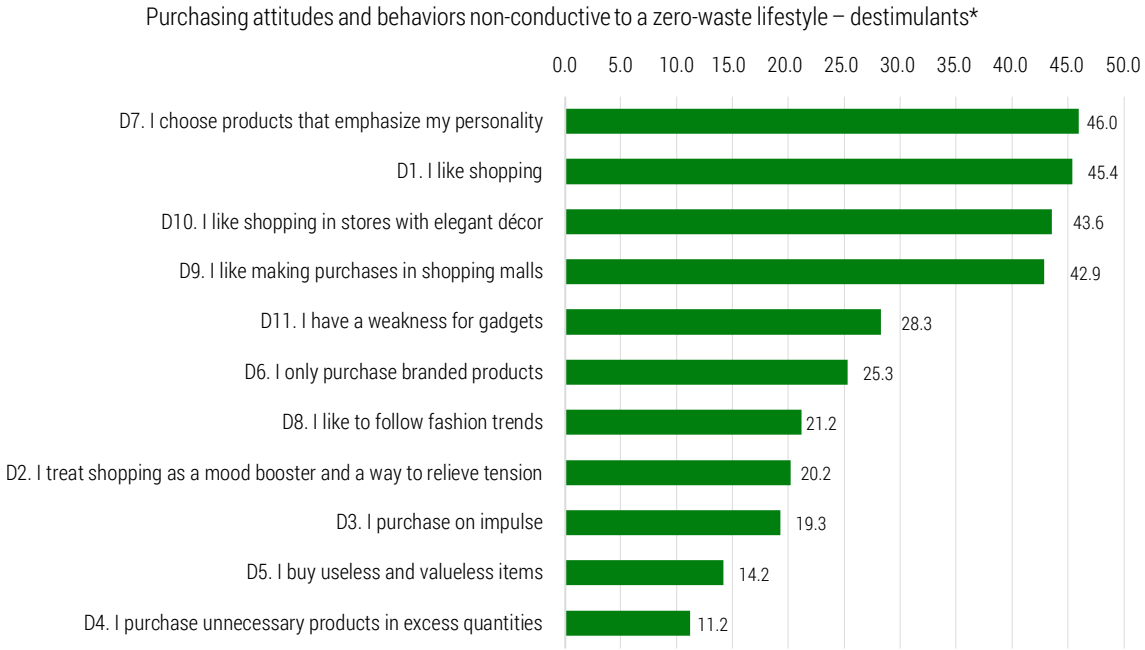
products. A weakness for gadgets was indicated by 28.3% of the surveyed. This attitude implies a greater tendency toward purchasing technological novelties or fashionable accessories that are replaceable by new versions in a short period of time. This attitude leads to increased electronic waste and contradicts the idea of zero waste. One in four respondents (25.3%) admitted to purchasing only brand-name products. The attachment to brand-name goods suggests that consumers choose products based on prestige and price, rather than sustainability or ecological value. Such choices may promote overconsumption and the purchasing of expensive, fashionable items. One in five respondents, in turn, expressed their interest in following fashion trends (21.2%), treating shopping as a mood booster and tension reliever (20.2%), and purchasing on impulse (19.3%). It can be concluded that those who admit to following fashion frequently purchase new products to stay on top of the trends. Such an attitude leads to rapid replacement of clothes or accessories and generates waste, which is the opposite of the idea of zero waste. Impulse purchases, as well as shopping treated as a form of mood enhancement, imply a lack of planning and can lead to unthought-out purchases of products that are not essential. The fewest respondents 'strongly' and 'rather' agreed with the statements 'I buy useless and valueless items' (14.2%) and 'I purchase unnecessary products in excess quantities' (11.2%), yet even these figures represent a significant percentage. Overconsumption of such products leads to increased waste and is detrimental to the environment. Summing up, the destimulants of a zero-waste lifestyle largely include purchasing attitudes and behaviours associated with emphasising one's personality, the pleasure derived from shopping, and a love of aesthetics and atmosphere at shopping locations. The least popular behaviours are purchasing unnecessary products in excess quantities and buying useless and valueless products. All of the above-mentioned purchasing attitudes and behaviours indicate a consumerist approach contrary to the principles of zero waste.



*Sum of 'strongly agree' and 'rather agree responses;' see Table 1 for a detailed description of independent variables – zero-waste lifestyle destimulants.

Figure 3. Consumer opinions reflecting purchasing attitudes and behaviours unfavorable to the idea of zero waste – destimulants

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

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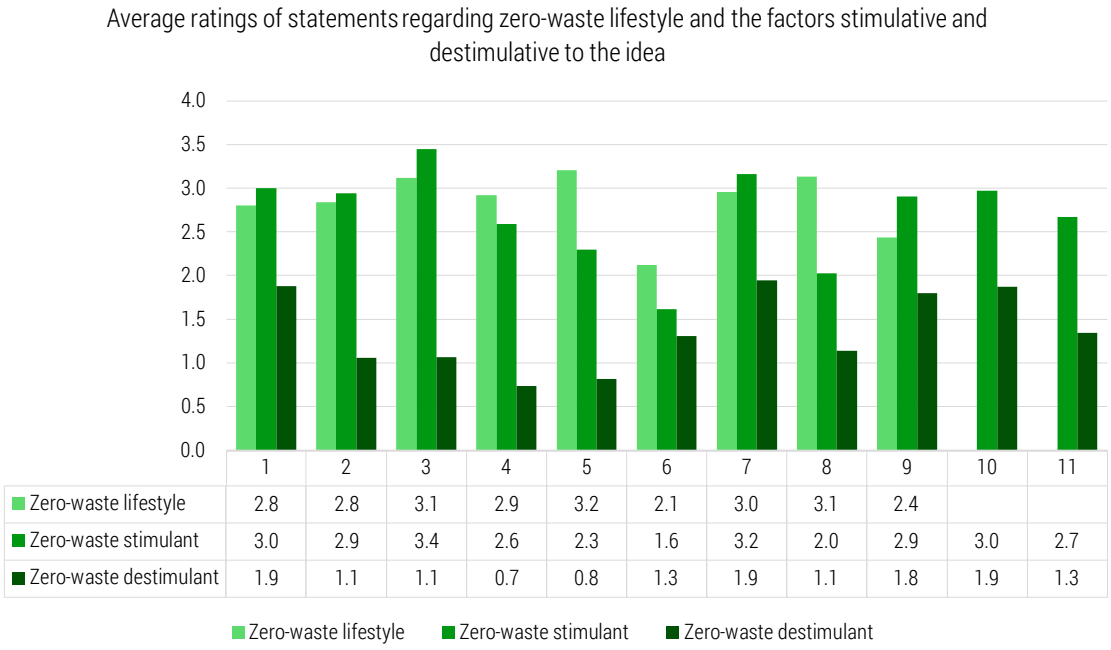
Comparison of zero-waste lifestyle with the stimulants and destimulants of the idea in consumer purchasing attitudes and behaviours

The declarations of consumer purchasing attitudes and behaviours identified as destimulants of a zero-waste lifestyle were indicated much less frequently than the stimulants, which is a positive sign in terms of consumers' realisation of the idea. On a scale of 1 to 5, with 1 indicating 'strongly disagree' and 5 – 'strongly agree,' the rates for nine zero-waste lifestyle behaviours ranged between 2.1 (Repurpose) and 3.2 (Rehome), while the rates for zero-waste lifestyle stimulants ranged between 3.4 (S3) and 1.6 (S6), and for destimulants – between 1.9 (D1, D7 and D10) and 0.7 (D4). Accordingly, the average score for declarations of zero-waste lifestyle realisation was 2.8. The average indication for stimulants, i.e., purchasing attitudes and behaviours conducive to zero waste realisation, was 2.7, while for destimulants, i.e., purchasing attitudes and behaviours non-conducive to zero waste realisation, it was 1.4 (Figure 4).



	1	2	3	4	5	6	7	8	9	10	11
Zero-waste lifestyle	2.8	2.8	3.1	2.9	3.2	2.1	3.0	3.1	2.4		
Zero-waste stimulant	3.0	2.9	3.4	2.6	2.3	1.6	3.2	2.0	2.9	3.0	2.7
Zero-waste destimulant	1.9	1.1	1.1	0.7	0.8	1.3	1.9	1.1	1.8	1.9	1.3

Figure 4. Comparison of zero-waste lifestyle with the purchasing attitudes and behaviours favourable (stimulants) and unfavourable (destimulants) to the idea (average indications/responses on a scale of 1 to 5 – see Table 1 for a description of possible responses)

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

Taken together, the statements regarding zero-waste behaviours were rated 0.1 points higher than the statements describing purchasing attitudes and behaviours favorable to the idea, referred to as stimulants. Another valuable finding is that the average rate of purchasing attitudes and behaviours unfavourable to the idea of a zero waste, which are the destimulants, was 1.4, that is, lower by as much as 1.4 than the average rate of zero-waste behaviours (2.8). There is a significant difference between the mean indications/responses of "zero-waste lifestyle" and "zero-waste stimulant", compared to "zero-waste destimulant". This provides an ample basis for the claim that the purchasing behaviour of Polish consumers is becoming increasingly responsible and rational, favouring the development of pro-ecological behaviour (Figure 4).

Assessment of the accordance of a zero-waste lifestyle with actual consumer purchasing attitudes and behaviours

The analysis indicates a relatively high consistency between consumers' declarations of zero-waste lifestyle implementation and their purchasing attitudes and behaviours. The correlations for a number of the stimulants show that consumers declaring a zero-waste lifestyle do in fact undertake efforts in support of this very idea. The purchasing attitudes and behaviours most consistent with a zero-waste lifestyle include:

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Avoidance of in-excess and impulse purchases – the correlations between Reduce behaviours and such stimulants as S2 – avoidance of impulse purchases (0.28) and S3 – avoidance of in-excess purchases (0.30) show that consumers declaring reduced consumption do in fact make informed purchasing decisions. This indicates an actual correspondence between their zero-waste attitudes and declarations, reflecting their eagerness to avoid overspending. Additionally, stimulant S10 – purchasing of only essential items (0.23) is likewise significantly favourable to the idea of reduced purchasing, a key element of a zero-waste lifestyle.

Informed choices and purchasing of green products – the clear correlation between Rethink behaviour and stimulant S5 – purchasing of eco-friendly products (0.29), shows that consumers who are mindful of green products do indeed make reflective purchasing decisions. The research of product information (S11) shows strong correlations with Reduce behaviour (0.28), suggesting that consumers who mindfully research product information more frequently actually reduce unnecessary purchases.

Pursuit of longer usability and multifunctionality of products – consumers' declarations of product multifunctionality checking (S7) show high correlations with Reuse (0.27), Repair (0.23) and Recycle (0.24) behaviours, indicating that the surveyess who are mindful of items' longer usability do in fact undertake efforts promoting product reuse, repair and recycling.

Creative resource management and second-hand buying – consumers declaring a zero-waste lifestyle do indeed purchase used, second-hand products, as indicated by the correlations between Repurpose and S8 (0.30). This is consistent with the zero waste declarations holding product reuse and reprocessing as a basic assumption. Likewise, S6 (creating products oneself rather than purchasing them) correlates with Repurpose (0.26), indicating that creativity in the use of resources is feasibly related to declarations of a zero-waste lifestyle (Table 3).

Table 3. Correlations between consumer opinions reflecting a zero-waste lifestyle (dependent variables) and purchasing attitudes and behaviours favorable to the idea (stimulants – independent variables)

Variable	Spearman rank-order correlation, *correlation coefficients significant at p<0.05								
	1. Rethink	2. Refuse	3. Reduce	4. Reuse	5. Rehome	6. Repurpose	7. Repair	8. Recycle	9.Rot
S1	0.08*	0.10*	0.24*	0.07*	0.10*	0.11*	0.08*	0.12*	0.11*
S2	0.00	0.27*	0.28*	0.04	0.17*	-0.09*	0.13*	0.10*	-0.08*
S3	0.12*	0.22*	0.30*	0.16*	0.22*	-0.05	0.22*	0.18*	0.07*
S4	-0.03	0.05	0.05	0.07*	0.06	0.01	0.05	0.05	-0.02
S5	0.29*	0.22*	0.21*	0.17*	0.13*	0.13*	0.19*	0.16*	0.23*
S6	0.08*	0.04	0.01	0.11*	-0.03	0.26*	0.07*	0.02	0.16*
S7	0.16*	0.00	0.17*	0.27*	0.22*	0.19*	0.23*	0.24*	0.28*
S8	0.11*	-0.15*	-0.03	0.16*	0.05	0.30*	0.08*	0.01	0.26*
S9	0.12*	0.01	0.14*	0.22*	0.14*	0.14*	0.17*	0.16*	0.21*
S10	0.10*	0.14*	0.23*	0.16*	0.15*	0.07*	0.11*	0.15*	0.10*
S11	0.18*	0.17*	0.28*	0.21*	0.20*	0.20*	0.21*	0.19*	0.20*

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

One stimulant showing a lower correlation with zero waste variables is S4 (I always purchase quality products). This may indicate that quality per se is not related directly to zero-waste efforts, yet consumers who prioritise product durability may seek to use products longer. The survey found that the impact of product quality on the promotion of zero-waste behaviour is minor, or the effect is even potentially reversed, suggesting the need for further research into the role of quality.

In conclusion, consumers' declarations of a zero-waste lifestyle are largely consistent with their actual purchasing attitudes and behaviours, which are considered stimulants of the idea analysed.

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Such key elements as avoidance of impulse purchases, pursuit of minimalism, choice of green products and pursuit of multifunctional and durable items are reflected in consumers' actual efforts.

At the other end of the spectrum, an analysis of zero-waste lifestyle destimulants was conducted to answer the question of whether consumers favouring zero-waste lifestyle significantly less commonly led consumerist lifestyles and were reluctant to make in-excess, impulse and irrational purchases. Spearman's rank-order correlation analysis allowed certain conclusions to be drawn. Consumers' declarations of zero-waste lifestyle realisation show relatively low and negative correlations with destimulants (in contrast to the stimulants), which may suggest that the analysed purchasing attitudes and behaviours are not fully accordant with and are narrowly related to zero-waste lifestyle. Nevertheless, several purchasing attitudes and behaviours can be identified as zero-waste lifestyle destimulants:

1. **Impulse and in-excess purchasing** – the negative correlations of variables D1 (I like shopping), D2 (I treat shopping as a mood booster), D3 (I purchase on impulse), D4 (I purchase unnecessary products in excess quantities) with zero-waste behaviour indicate that consumers who prefer shopping on impulse and overconsumption, engage in zero-waste practices less frequently. Variable D3, for example, showed negative correlations with variables Refuse (-0.18) and Reduce (-0.18), whereas variable D4 with Refuse (-0.26), Reduce (-0.26) and Rehome (-0.20), which indicates that consumers who purchase items in excess quantities are reluctant to engage in reduction of their purchases or redistribution on unneeded items to others.
2. **Fashion and brand-related purchasing** – the correlations of variables D6 (I only purchase branded products) and D8 (I like to follow fashion trends) with zero-waste behaviour are weak and mostly negative. Variable D6 shows negative correlation with variables Refuse (-0.16), Reduce (-0.15), Reuse (-0.15), Rehome (-0.13) and Repair (-0.13), whereas variable D8 is correlated with variables Reduce (-0.11), Reuse (-0.15), Rehome (-0.15) and Recycle (-0.13), indicating that fashion-driven consumers, as well as those who prefer branded products, are less inclined to reduce consumption, redistribute used products to others and engage in recycling.

Table 4. Correlations between consumer opinions reflecting a zero-waste lifestyle (dependent variables) and purchasing attitudes and behaviours unfavourable to the idea (destimulants – independent variables)

Variable	Spearman rank-order correlation, *correlation coefficients significant at p<0.05								
	1. Rethink	2. Refuse	3. Reduce	4. Reuse	5. Rehome	6. Repurpose	7. Repair	8. Recycle	9. Rot
D1	-0.07*	0.16*	-0.02	-0.09*	-0.05	-0.08*	-0.04	-0.06*	-0.14*
D2	-0.01	-0.03	-0.18*	-0.12*	-0.11*	0.02	-0.12*	-0.13*	-0.09*
D3	-0.02	-0.18*	-0.18*	-0.08*	-0.15*	0.08*	-0.13*	-0.11*	0.01
D4	-0.07*	-0.26*	-0.26*	-0.07*	-0.20*	0.10*	-0.11*	-0.14*	0.02
D5	0.02	-0.28*	-0.22*	-0.07*	-0.15*	0.18*	-0.11*	-0.12*	0.14*
D6	-0.06	-0.16*	-0.15*	-0.15*	-0.13*	0.01	-0.13*	-0.10*	-0.03
D7	-0.01	0.02	0.03	-0.01	0.01	0.06	-0.04	-0.07*	-0.04
D8	-0.04	0.06	-0.11*	-0.15*	-0.15*	-0.03	-0.07*	-0.13*	-0.13*
D9	0.01	-0.04	-0.08*	-0.10*	-0.05	0.02	-0.11*	-0.02	0.04
D10	-0.08*	0.15*	0.03	-0.13*	-0.02	-0.11*	-0.08*	-0.07*	-0.16*
D11	0.04	-0.30*	-0.24*	0.03	-0.13*	0.17*	-0.08*	-0.05	0.17*

Source: authors' work, under project No. 2022/06/X/HS4/01158, n = 1000.

3. **Aesthetics and gadget-related purchasing** – this category of behaviour comprises of variables D9 (I like making purchases in shopping malls), D10 (I like shopping in stores with elegant décor), D11 (I have a weakness for gadgets). Variable D9 correlates negatively and weakly with variables Reduce (-0.08), Reuse (-0.10) Repair (-0.14), variable D10 with variables Reuse (-0.13) and Repurpose (-0.11), and variable D11 – the strongest – with variables Refuse (-0.30), Reduce

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(-0.24) and Rehome (-0.13), which indicates that consumers' preferences for aesthetics, gadgets and shopping in appealing stores are inconsistent with zero-waste practices.

4. **Purchasing of useless and valueless items** – the category formed by variable D5 (I buy useless and valueless items) shows negative correlation with variables Refuse (-0.28), Reduce (-0.22), Rehome (-0.15) and Recycle (-0.12), suggesting that consumers who buy useless items less frequently forego purchases of unnecessary goods, reduce their purchases or redistribute unneeded items to others (Table 4).

Summing up, it can be concluded that consumer attitudes associated with over-shopping, consumerism and the drive to follow fashion and own brand-name products are inconsistent with realising zero waste. Consumers who are prone to impulse buying, prefer shopping at malls, follow fashion trends or purchase useless products show less commitment to reduced consumption, product repair, recycling or reuse. This means that consumerist attitudes are demotivators in pursuing a zero-waste lifestyle, promoting mindful, responsible shopping and environmental concern.

Discussion

The conducted study confirmed the validity of hypothesis 1. Polish consumers are supporters / sympathizers of a zero-waste lifestyle, as evidenced by the relatively frequent declaration of behaviours aimed at curtailing overconsumption and generating unnecessary post-consumption waste. The literature features several studies on consumer awareness of the advantages of zero waste and the pursuit of such a lifestyle (Badowska & Delińska, 2019; Bogusz et al., 2023; Maulana & Dwipayanti, 2022; Zaman, 2023).

The most common zero-waste behaviours among Polish consumers entail efforts to reduce consumption of unnecessary products (Reduce), redistribute them to other people (Rehome) and segregate the waste generated (Recycle). A study conducted by Săplăcan and Márton (2019) in Hungary, for instance, confirmed that waste reduction initiatives constitute the most substantial component of zero-waste behaviour; nevertheless, reuse and recycling of products, packaging or waste are dimensions of equal importance. In contrast, a study conducted in selected Central and Eastern European countries, including Poland, Slovakia and Ukraine, revealed a substantial link between households' primary environmental efforts, in the form of responsible consumption, reuse and recycling of selected products, packaging, materials and food, and the concept of zero waste. The respondents consciously identify these activities with a zero-waste lifestyle (Bogusz et al., 2023).

Hypothesis 2 assuming a positive correlation between zero-waste lifestyle and the stimulants thereof, i.e., pro-ecological and responsible consumer purchasing attitudes and behaviours that are well thought out, planned and rational, has also been fully confirmed. Likewise, hypothesis 3 has been validated, although the correlations with destimulants of a zero-waste lifestyle, generally negative, were much weaker and less frequently significant. Nevertheless, a negative relationship between zero-waste lifestyle and consumer purchasing attitudes and behaviours conducive to overconsumption and the consequent generation of post-consumption waste has been confirmed.

The study and analyses carried out fill the research gap in confirming the correlation between a zero-waste lifestyle and consumer purchasing attitudes and behaviours. The literature features studies listing various determinants of a zero-waste lifestyle, including personal values and beliefs, a sense of responsibility (Ribeiro et al., 2023), positive attitude toward zero-waste efforts, influencers' social media activity and promotion of the zero waste concept (Buczyńska-Pizoń, 2020; Lu, 2024; Săplăcan & Márton, 2019). The determinant of zero waste mindfulness is gender, and the concept is more widespread among women (Badowska & Delińska, 2019). There are, however, no studies presenting precisely defined, pro-ecological, rational and responsible purchasing attitudes and behaviours as determinants of a zero-waste lifestyle.

Studies examining the accordance of consumers' purchase intentions with zero-waste behaviour can also be found in the literature. Based on a study of cosmetic products, researchers found that eco-friendly packaging, pro-environmental beliefs and parasocial interactions positively influence consumers' altruistic motivation and purchase intentions. These factors ultimately collectively contribute to the purchasing of zero-waste cosmetics (Prakash et al., 2024). Sang et al. (2022), in turn,

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have listed the barriers impeding consumers from purchasing zero-waste products. The results of their study suggest that these include the barriers of usage, value, risk and tradition. Environmental awareness, purchase intentions and actual purchase behaviours involving eco-friendly products were also studied by Kim and Lee (2023) among Korean consumers. The authors found that consumers' environmental knowledge and intention to purchase green products significantly influenced the purchasing behaviour involving eco-friendly products. The perceived consumer performance of sustainable consumption behaviour, for example, in Vietnam, was also studied by Minh and Quynh (2024). The study found a positive correlation between consumers' intention (including concern for the environment, attitudes, subjective norms, personal norms) and sustainable consumption behaviour.

It has been noted that the literature relevant to the issue under study offers studies on the relationship between consumer intentions and actual behaviour. Many studies have addressed purchasing behaviour regarding eco-friendly products. The survey carried out for the purpose of this article, by contrast, presents the respondents' opinions on purchasing attitudes and behaviours concerning all products, not only green products. Consequently, the accordance of these opinions with declared zero-waste behaviours was examined. This represents a gap that the Authors sought to fill, which has not been thoroughly researched and described elsewhere.

Conclusions

The results of the survey confirm that a zero-waste lifestyle is broadly implemented by Polish consumers, especially in the aspect of reducing consumption, redistributing unnecessary items to others, recycling and repairing goods. Less often, consumers act preventively, that is, they are aware of the threat of a crisis, are able to analyse their needs first and can refrain from purchasing goods they consider non-essential.

The purchasing behaviour of consumers favouring a zero-waste lifestyle is well thought out, planned and rational, whereas those opposing the idea mainly make purchases in shopping malls and prefer to shop for gadgets and brand-name products. This thesis has been confirmed by correlation analyses. A positive relationship exists between a zero-waste lifestyle and pro-environmental, responsible consumer purchasing attitudes and behaviours, representing the stimulants of the idea. There is a negative relationship between zero-waste lifestyle and the consumer purchasing attitudes and behaviours conducive to overconsumption and the consequent generation of post-consumption waste, which constitute the destimulants of this idea. Among the purchasing attitudes and behaviours most consistent with zero-waste lifestyle realisation are avoidance of in excess and impulse purchases, informed choices and purchasing of eco-friendly products, pursuit of product longevity and multifunctionality, creative resource management and second-hand shopping. The purchasing attitudes and behaviours identified as destimulants of a zero-waste lifestyle, in turn, include impulse purchases, in-excess purchases, fashion and brand-related purchases, purchases based on aesthetics and gadgetry, as well as purchases of useless and valueless items.

The high rates of zero-waste lifestyle stimulants, such as mindful shopping and opting for durable products, indicate a strong tendency toward responsible consumption. Simultaneously, destimulants, such as impulse purchases and gadget fondness, were indicated much less frequently, which suggests a limited influence of consumerist attitudes on the respondents. The average rates for zero waste declarations are higher than for destimulants, indicating Polish consumers' growing responsible and pro-environmental attitudes. The declarations of zero-waste lifestyle realisation largely correspond with consumers' purchasing attitudes. The high correlations of attitudes favouring reduced shopping, opting for eco-friendly and sustainable products, as well as creative resource management, show that consumers declaring a zero-waste lifestyle undertake consumption efforts consistent with these assumptions.

The results provide an important contribution to the existing research on zero-waste lifestyle from a consumer perspective. Noteworthy is the high scale of pro-environmental and responsible purchasing attitudes and behaviours prompting consumers to manifest zero-waste lifestyles, which fosters the market potential and can serve as a direction in developing product and promotional strategies. Emphasis should be placed on communicating societies' propensity to reduce consump-

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tion, and raising awareness of the environmental, health-related and economic benefits of implementing a zero-waste lifestyle. The study provides a practical input for environmental organisations, businesses, policy makers, researchers and educators. By identifying the forms of behaviour representing destimulants of a zero-waste lifestyle, a clearer direction has been established for more effective development of educational and promotional campaigns that support the idea of zero waste, promote sustainable consumption and help reduce waste generation. Knowledge of zero-waste lifestyle stimulants and destimulants continues to expand and warrants more research. We suggest a more in-depth analysis of the barriers to adopting a zero-waste lifestyle and widespread popularisation of initiatives promoting waste reduction.

One limitation in the considerations and analyses is the spatial scope, which is narrowed down to Polish consumers. The cultural and economic differences across countries can significantly affect consumer purchasing attitudes and behaviour. Nevertheless, the conclusions drawn, indicative of future research directions, can be referenced against other European countries, especially where environmental awareness and zero-waste lifestyles are still in development.

A potential discrepancy between declared values and actual behaviours represents a methodological limitation, for example, in the context of findings from the GLOBE study on cultural dimensions. Although respondents present pro-environmental attitudes and endorse values associated with responsible and sustainable consumption, these declarations do not necessarily translate into consistent or observable behavioural patterns. Cultural norms, the influence of social desirability bias, and respondents' potentially aspirational self-perceptions may have contributed to distortions in the reported data. In this context, it is recommended that future research should involve behavioural observation or alternative methodological approaches capable of verifying the degree of congruence between self-reported declarations and actual practices exhibited by research participants.

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The contribution of the authors

Conceptualization, A.M. and E.G.G.; literature review, A.M. and E.G.G.; methodology, A.M. and E.G.G.; formal analysis, A.M. and E.G.G.; writing, A.M. and E.G.G.; conclusions and discussion, A.M. and E.G.G.

The authors have read and approved the published version of the manuscript.

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BADANIE EMPIRYCZNE ZGODNOŚCI STYLU ŻYCIA ZERO WASTE Z POSTAWAMI I ZACHOWANIAMI ZAKUPOWYMI KONSUMENTÓW

STRESZCZENIE: Konsumpcyjny styl życia jaki prowadzi większość społeczeństwa sprzyja zanieczyszczeniu środowiska, a przykładają się do tego złe nawyki konsumenckie i szybko zmieniające się trendy. Wśród części konsumentów wrażliwych na ochronę środowiska pojawił się styl życia zero waste zakładający maksymalne zmniejszenie ilości generowanych odpadów. Celem artykułu jest weryfikacja zgodności stylu życia zero waste z rzeczywistymi postawami i zachowaniami zakupowymi konsumentów oraz wskazanie stymulant i destymulant tej koncepcji. Badanie zostało przeprowadzone w Polsce w 2023 roku na próbie 1000 osób metodą CATI. Konsumentom nie są obce zachowania odzwierciedlające styl życia zero waste. Ponad 80% badanych ogranicza konsumpcję, znajduje niepotrzebnym rzeczom nowy dom, przetwarza je, wykorzystuje ponownie i naprawia. Nieco rzadziej konsumenci działają prewencyjnie, czyli najpierw rozważają potrzebę zakupu dobra i ostatecznie rezygnują z niego. Zachowania zakupowe konsumentów, którzy są zwolennikami stylu życia zero waste są przemyślane, zaplanowane i racjonalne. Z kolei zwolennikami stylu życia zero waste nie są osoby, które lubią robić zakupy, głównie w centrach handlowych oraz lubią kupować gadżety i produkty markowe. Należy wykorzystać wysoką skalę proekologicznych i odpowiedzialnych postaw i zachowań zakupowych konsumentów jako wytyczną do opracowywania strategii produktowych i promocyjnych, kłaść nacisk na edukację i informowanie o skłonności konsumentów do redukcji odpadów. Wsparcie inicjatyw związanych ze stylem życia zero waste powinno stanowić integralny element tych działań. Istotne jest dalsze podnoszenie świadomości i rozpoznawanie form zachowań będących destymulantami tego stylu. Zrozumienie zachowań wpisujących się w realizację stylu życia zero waste, jak również proekologicznych i odpowiedzialnych postaw konsumenckich, jest kluczowe dla praktyków gospodarczych oraz decydentów dążących do wdrażania zrównoważonego podejścia do konsumpcji i ograniczania odpadów.

SŁOWA KLUCZOWE: styl życia zero waste, konsument, postawy, zachowania zakupowe, stymulanty i destymulanty

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